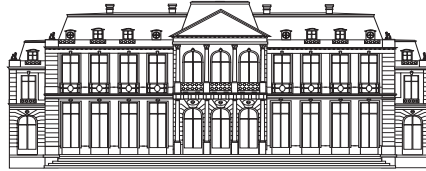


**Organisation for Economic Co-operation and Development**



**Organisation de Coopération et de Développement Économiques**

**Seminar on**

**The Development of  
Training, Accreditation and Licensing  
Programmes for Accountants and Auditors  
in Transition Economies**

**in Co-operation with the  
United States Agency for International Development (USAID)**

**Training and Certification of “Accounting Technicians” in Transition  
Economies**

*by*

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*e*

**7-9 December 1998**

**Location: OECD Headquarters**  
2, rue André-Pascal  
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1. Introduction

The International Federation of Accountants (IFAC) Education Guideline #7 sketches the Educational and Training Requirements for “Accounting Technicians.” This guideline makes it clear that, these “accounting technicians” are to constitute an integral part of overall accounting and auditing training, and educational development, in both developed and transition economies. The scope and contents of IFAC’s #7 International Education Guideline (IEG) have been presented elsewhere, and I believe you have a copy in English and Russian.

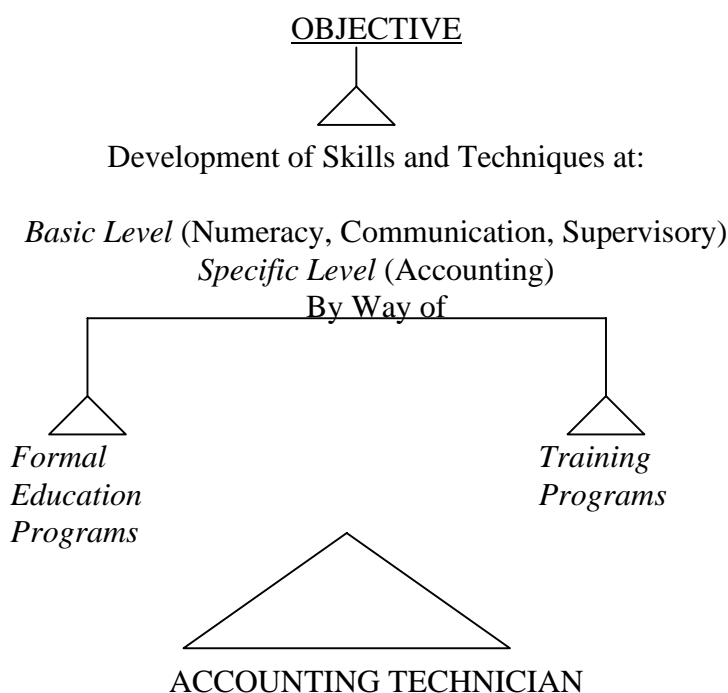
The “technicians” activities (the work “technicians is subject to revision in my opinion and might better be called “associate accountants” or “para-professional accountants”) are clearly distinguishable from the clerical jobs in accounting, such as bookkeeping. The technician’s tasks (i.e., the middle level of accountancy) will require knowledge, understanding and application of both accounting principles, methods and techniques of accounting. Their work areas are in industry, commerce, public practice or the public (government) sector. The fundamental objective of education and training for technicians are visualized by IFAC at two levels, i.e., the basic and specific level. At the basic skills level it would be: developing numeracy, ability to communicate, supervisory potential, and general educational achievement. At the specific level it involves: to provide relevant knowledge and skills concerning the field in which a technician is to operate. Programs of both education and training should be relevant to these two levels. In too many countries this important middle level (the para-professional or associate accountant) has been neglected from both an 1) educational/training and 2) certification level, and this also may apply to the CIS countries. Furthermore, this middle level of accountants may need far greater official and institutional recognition, while suitable educational materials are to be developed and disseminated. [The Level 2 Accountants Training Program for Russia and other CIS countries is essentially geared to this middle level. The Professional Training System as outlined by Prof. Sheremet in the previous year covers 4 Levels, from Level 1 clerks to Level 4 professional (certified) accountants.]

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Three criteria may be useful (IEG #7) in identifying “accounting technicians” on the basis of their work areas:

- (i) The job exists in the specialist accounting/finance department of the employing establishment (or in the ‘general’ office of small establishments where no specialist department exists).
- (ii) The job is exclusively or mainly concerned with accounting (i.e., more than 50% of the incumbent’s time is spent on accountancy tasks).
- (iii) The job is at a higher level of responsibility than purely routine clerical jobs in the establishment, but does not require full professional skills for it to be performed satisfactorily.

IFAC’s Guideline #7 sketches the following diagram:



The IFAC Guideline also presents some general training modules applicable to the Technicians Training.

In this presentation we intend to cover more specifically a series of potential modules to be covered in the training of accounting technicians – and for certification. A specific institution or body in a country should be dealing with developing, regulating and reviewing the education and training of associate accountants (technicians). Such requirements tend to differ by country. Furthermore it appears important that “Accounting Technicians” as “Associate Accountants” become recognized in

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countries, based upon qualification tests and Certificates or Diplomas. Opportunities for progression towards full professional training and certifications also have to exist in order to attain a higher level, and a step approach should be outlined. Accordingly the accounting technicians and the professional training have to be clearly linked into a pyramidal approach, while sound technician training and development constitutes a valid part in a country's overall accounting and financial enhancement, and accordingly is critical for a country's economic development. This middle or associate level constitutes a vital activity to soundly develop accountancy structures and processes leading towards effective and efficient operations.

This also warrants regional and international cohesion whereby certificates or diplomas should be recognized accordingly. The institutional structure in which technician training is carried out therefore also warrants profounder evaluation in most transition and developed economies. In this context "long distance learning" and "computer based training" programs (CBT) are good ways to handle such courses/programs. The Internet is an effective transferring mechanism.

## 2. A Brief History

The first accounting technicians body was set up in the UK in 1980 and in Ireland in 1983. Separate accounting technician bodies have also been set up in other countries. The International Federation of Accountants (IFAC) and the Confederation of Asian and Pacific Accountants (CAPA) recognized Accounting Technician bodies by changing their constitution to admit them as Associate Members. The international funding agencies like the World Bank (WB) and Asian Development Bank (ADB) too have been closely involved in the promotion of Accounting Technician bodies with both IFAC and CAPA. International Conferences were held in 1983 in Manila (Philippines) and 1989 in Seoul (Korea) to deal extensively with accounting technicians training. The preparation of Teaching Resource Materials (TRM) for Accounting Technicians were undertaken by CAPA and ADB in 1987, and eight specific training volumes were prepared by these organizations, funded by the Asian Development Bank. IFAC's IEG No. 7 (Education and Training Requirements for Accounting Technicians) marked the first formal recognition by IFAC of "Accounting Technicians" as an identifiable group internationally.

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### 3. Training Guidelines

IFAC's IEG No. 7 adopted very much an input approach for the education and training of accounting technicians. As conveyed before, the input was specified at a Basic Level incorporating the *development of numeracy skills, ability to communicate, supervisory potential and general educational requirements*. There was further input at a Specific Level incorporating skills related to the field of Accounting. At both levels there were distinctive roles for *formal education and training programs*. The educational programs were seen as including courses such as: Basic Accounting Processes and Systems; Basic Communications; Numeracy and Statistics; Accounting Concepts and Practice; Elements of Information Systems; and Organizational Environment (legal and Socio-Economic). An Appendix provided outlines of *Aims* and *Syllabi* for each of these courses. Training activities were specified separately from the educational courses, and related to particular functional activities such as Purchase Accounting, Sales and Credit Control, payroll, Cash and Banking, etc., under the general rubric of Basic Office Training. Training was also to be directed at the development of Communication, Supervisory and Computing skills.

The Confederation of Asian and Pacific Accountants (CAPA) has recently (August 1998) outlined specific "Competency Guidelines for Accounting Technicians" based upon a report on this issue prepared by the New Zealand Institute of Chartered Accountants. This study is expected to be of use to:

1. develop and publish comprehensive guidance material on delivering education and training in accordance with the competency guidelines, and
2. provide guidance as to how to assess whether candidates meet the level of competency required.

Together with the outlined Competency Guidelines such material is seen as being of use to professional and technician bodies, to colleges, and to employers as means of enhancing the education and skills of future generations of "accounting technicians" (associate accountants).

The CAPA guidelines for "technician training" address both accounting and general business knowledge areas and are structured into five areas:

1. Introductory
2. The Environment of Business
3. The Accounting Process
4. Specific Applications of Accounting Knowledge
5. Business Related Knowledge

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The levels of competency are identified at three levels:

- Level 1 (Awareness)
- Level 2 (Knowledge)
- Level 3 (Skill)

Each level builds on competencies developed at lower levels, and this approach appears very useful.

The levels of competency that have been indicated are as follows:

Level 1 – Awareness

The candidate demonstrates familiarity with the concepts in question, can define it in overview terms and can relate the importance or relevance of the concepts to the activities of a professional accountant.

Level 2 – Knowledge

This builds upon awareness. The candidate is able to explain the concepts; describe and discriminate between its component parts and describe their inter-relationships; recognize instances of the concept; describe processes, theories and judgement issues; without necessarily being able to perform in those areas with professional skill.

Level 3 – Skill

This builds upon the knowledge level. The candidate is able to execute or implement knowledge; apply the knowledge to real world problems in real world situations. In so doing, the candidate can display to a satisfactory degree the level of competence reasonably to be expected of an Accounting Technician at career entrant level.

In our opinion the mastering of these three levels may constitute part of the basis for moving to the professional level; however this bridge level needs to be spelled out by countries/institutes, and hopefully also IFAC. However many “associate accountants” are content with the level achieved. As for all levels “continuing educational requirements” are to be an integral part of technician’s certification.

4. Contents of CAPA Guidelines

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The CAPA Guidelines give, as a whole, a high level of specification of the areas of knowledge, skills and abilities expected to be gained by Accounting Technicians in a preprofessional-qualification program. The Guidelines, which address both accounting and general business knowledge, are structured into five areas:

- A. INTRODUCTORY
- B. THE ENVIRONMENT OF BUSINESS
- C. THE ACCOUNTING PROCESS
- D. SPECIFIC APPLICATIONS OF ACCOUNTING KNOWLEDGE
- E. BUSINESS RELATED KNOWLEDGE

The nature of the material included in each of these five areas is as follows:

**A. INTRODUCTORY**

- personal income and wealth
- personal creditworthiness
- banking system
- business activities
- business ownership
- key success factors in small business
- the nature of accounting

**B. THE ENVIRONMENT OF BUSINESS**

- economic environment
- legal environment
- legislative requirements
- ethical requirements
- professional accounting body

**C. THE ACCOUNTING PROCESS**

- accounting equation
- business transactions to trial balance
- measure of financial performance and position
- financial statements for a sole proprietor
- financial statement analysis
- presentation of financial information
- cash versus accrual accounting
- bank reconciliation

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- control in accounting systems
- accounting policies

**D. SPECIFIC APPLICATIONS OF ACCOUNTING KNOWLEDGE**

- limited liability companies
- public sector entities
- manufacturing enterprises
- budgets
- break even analysis
- auditing

**E. BUSINESS RELATED KNOWLEDGE**

- taxation
- financial management
- computing
- organization and management
- communication
- mathematical analysis

In Annex A we have presented for above areas C & D (the accounting areas) the specific suggested contents (as per CAPA guidelines).

[In Annex A, Indicative Level refers to the three levels of competency, as mentioned previously (1-3).  
W = workplace.]

CAPA and ADB have previously (1987) developed a fairly comprehensive set of Teaching Resource Materials for Accounting Technicians. This material (8 courses and manuals) however is subject to updating. In my opinion this material, and its revisions, also could be effectively adapted and translated for Accounting Technicians Training for CIS and other countries, where such courses appear warranted.

**5. Conclusion**



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Unfortunately in many countries the middle level of accountants (the accounting technicians or associate accountants) tend to be neglected both from an educational/training, certification and social recognition point of view. Greater recognition appears warranted, whereby Certificates for the competency level preferably should be offered based upon well evaluated training programs. Such training also could be usefully and effectively coordinated internationally. Each country however also has to establish how this level fits into its institutional or accountancy bodies framework. A greater level of consistency in the region and internationally, appears warranted. The training for the “Accounting Technicians” doesn’t only have to be performed at physical institutions, but nowadays “long distance learning” and “computer based training” (CBT) constitute effective ways to educate large numbers of people at diverse locations. The Internet can be excellent mechanism to enhance such formats of training. “Information technology” could be applied beneficially.

I do hope this outline contributes to appraising and implementing this “technician” training, education and certification within the CIS countries, and the vital role the technician level plays within the accounting, financial and economic structure and process. Accordingly this paper may be of some benefit to you in the further evaluation of this topic, and the enhancement of this level of education within the framework of the regional and countries accountancy development per se.

A.J.H.E.  
Nov. 98

### ***C. The Accounting Process***

<b>Competence Required</b>	<b>Activity to Develop and Demonstrate Competence</b>	<b>Indicative Level</b>	<b>Work Place</b>
Understand the nature of an accounting entity and the <b>accounting equation</b>	• Describe the accounting entity concept	3	
	• Apply the accounting equation ( $A+E=L+OE+R$ ) Where A = Assets, E = Expenses, L = Liabilities, OE = Owners equity, R = Revenue	3	W
Understand the various types of <b>business transactions</b> in terms of accounting equation	<ul style="list-style-type: none"> <li>• Compare and distinguish between the following – <ul style="list-style-type: none"> <li>- cash and credit transactions</li> <li>- revenue and capital transactions</li> </ul> </li> <li>• Illustrate the impact of cash, credit, revenue, and capital transactions on the accounting equation</li> <li>• Classify business transactions in terms of the accounting equation</li> </ul>	3	W
Skill in applications of the accounting equation to <b>business transactions</b> through preparation of a <b>trial balance</b>	• Prepare a Chart of Accounts	3	W
	• Prepare journals from source records	3	W
	• Prepare general ledger accounts	3	W
	• Extract a trial balance	3	W
	In preparing the above accounting records, the following types of business transactions should be addressed – <ul style="list-style-type: none"> <li>- cash inwards</li> <li>- cash outwards</li> <li>- sales</li> <li>- accounts receivable</li> <li>- purchases</li> <li>- accounts payable</li> <li>- inventories</li> <li>- fixed assets</li> <li>- payroll</li> </ul>		
Understand the concepts needed to <b>measure financial performance and position</b>	• Describe and provide examples of accounting period and matching concepts	3	W
	• Outline the need for and apply generally accepting accounting	2	

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	principles		
	• Describe the professional and legislative requirements for financial reporting standards and their application to external financial reports	2	
	• Describe the nature of, and calculate depreciation	3	W
	• Describe the nature of, calculate, and record balance date adjustments	3	W
Skill in preparing financial statements for a <b>sole proprietor</b> from a trial balance	• Prepare and explain a Statement of Financial Performance	3	W
	• Prepare and explain a Profit Distribution Statement	3	W
	• Prepare and explain a Statement of Financial Position	3	W
	• Prepare and explain a Cash Flow Statement	3	W
Skill in <b>analysing financial statements</b> , including calculation and analysis of ratios and percentages	• Calculate and explain percentages relevant to profitability	3	W
	• Calculate and explain percentages relevant to liquidity	3	W
	• Calculate and explain percentages relevant to financial structure and stability	3	W
Skill in <b>analysing financial statements</b> , including calculation and analysis of ratios and percentages	• Calculate and explain percentages relevant to activity levels	3	W
	• Explain the significance of, and reasons for, changes in ratios over time	3	W
An ability to <b>present financial information</b> in alternative ways	• Present financial information in different formats	2	W
	• Use graphs, tables, pictorial presentation, ratios, and percentages	2	W
	• Describe the limitation of financial statements from a user's perspective	2	W
Understand the difference between a <b>cash based system</b> of recording financial information and <b>accrual accounting</b>	• Prepare for the same entity financial statements on a cash basis and on an accrual basis	3	W

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Skill in the preparation of a <b>bank reconciliation</b>	• Explain the use of a bank reconciliation	3	W
	• Prepare a bank reconciliation	3	W

Understand the major requirements for effective operation and <b>control in accounting systems</b>	• Identify the internal controls necessary for the following accounting sub-systems –  - cash inwards - cash outwards - petty cash - sales - accounts receivable - purchases - accounts payable - inventory - fixed assets - payroll - general ledger	3	W
	• Specify the principal user requirements of each sub-system above	2	
	• Document by way of flow charts the accounting sub-systems listed above	3	
Knowledge of the requirements of an <b>accounting software package</b> for each major accounting sub-system	• Specify key factors in selection of an accounting software package for three of the sub-systems identified above	3	W
	• Apply an accounting software package in respect of the general ledger and at least two other accounting sub-systems identified above	3	
	• Evaluate the accounting software packages applied above	2	
Understand the effect of adopting alternative <b>accounting policies</b> for various significant items appearing in financial	• Compare the use of alternative accounting policies for – - revenue recognition - inventory valuation - depreciation	2	

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statements	- valuation of fixed assets		
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